

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF
WEYERHAEUSER COMPANY
(Longview Plant),

Appellant,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,

Respondent.

PCHB No. 85-220

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW AND
ORDER

THIS MATTER, concerns the appeal of NPDES Permit No. WA000012-4 and Department of Ecology Order DE 85-461. Both the permit and order appealed were directed to Weyerhaeuser's Longview facilities. The provisions of the permit and order on appeal concern imposition of an effluent limitation on discharges of waste from Weyerhaeuser's raw water treatment plants at Longview and imposition of effluent limitations on additional increments of production at NORPAC and R-W Paper.

The matter came on for formal hearing before the Pollution Control

1 Hearings Board, Lawrence J. Faulk, Chairman, presiding, Gayle Rotnrock
2 and Wick Dufford, on June 2, 3, and 4, 1986 in Lacey, Washington.

3 Appellant was represented by Charles K. Douthwaite, Michael R.
4 Thorp, and Patrick D. Coogan. Respondent Department of Ecology was
5 represented by Assistant Attorney General Charles W. Lean. The matter
6 was officially reported by Donna Wood and Nancy Miller of Robert Lewis
7 and Associates on the first and third days and Cneri Davidson of Gene
8 Barker and Associates on the second day.

9 A prehearing conference was convened in Lacey, Washington on March
10 11, 1986. A prehearing order was issued thereafter and amended once
11 at the request of the Appellant.

12 The prehearing order provided that the permit and order provisions
13 appealed here were to be stayed pending resolution of this matter.

14 Witnesses were sworn and testified. Exhibits were admitted and
15 examined. From the testimony heard and the exhibits examined, the
16 Board makes these

17 EVIDENTIARY RULINGS

18 There were four evidentiary issues which arose during the normal
19 hearing of this matter in which a ruling was deferred. Those issues
20 are:

21 (1) Whether testimony and exhibits reporting the results of
22 Weyerhaeuser's attempts to assess the impact of its water treatment
23 plant discharges on the Columbia River are relevant;

24 (2) Whether testimony and three exhibits describing the United
25 States Corps of Engineers program for disposal of dredge spoils in the

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Columbia River near Weyerhaeuser's outfall is relevant;

(3) Whether testimony and exhibits describing the financial performance of Weyerhaeuser's Longview facilities, and the additional cost per ton of pulp and paperboard products produced at Longview attributable to compliance with Ecology's permit appealed in this matter is relevant;

(4) Whether a memo from Ecology's permit writer to his superiors (Ex. A-7) should be excluded from the record as privileged.

Issue 1: Evidence Regarding Water Quality.

We have recently addressed this question in several cases. E.G., City of Pasco v. Dept. of Ecology, PCHB No. 84-339; City of Lynnwood v. Dept. of Ecology, PCHB No. 84-206. We adhere to our conclusions reached in those cases.

Chapter 90.48 RCW, the State Water Pollution Control Act, provides the basic framework for the program of water pollution control in effect in this state, including permit requirements and enforcement powers. The level of treatment which must be imposed is, however, best stated in a section of a companion statute, namely RCW 90.52.040:

In the administration of the provisions of chapter 90.48 RCW, the director of the department of ecology shall, regardless of the quality of the water of the state to which wastes are discharged or proposed for discharge and regardless of the minimum water quality standards established by the director for said waters, require wastes to be provided with all known, available and reasonable methods of treatment prior to their discharge or entry into waters of the state. (Emphasis added.)

We conclude that, except where water quality standards are violated or

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1 water quality degradation is a factor, the matter of water quality is
2 irrelevant to the question of the level of treatment a discharger must
3 provide. See RCW 90.54.020(3)(b). The treatment standard is
4 primarily a technology standard. The same is also true under the
5 federal Clean Water Act. See Appalachian Power Co. v. U.S.
6 Environmental Protection Agency, 671 F.2d 801 (4th Cir. 1982).

7 We therefore hold that the evidence offered by appellant with
8 respect to the quality or impacts upon receiving waters is not
9 relevant. We have not considered such evidence.

10 Issue 2: Corps of Engineers Dredging Program.

11 Weyerhaeuser offered testimony and exhibits about the program of
12 United States Army Corps of Engineers for disposal of dredge spoils in
13 the vicinity of Weyerhaeuser's water treatment plant discharge into
14 the Columbia River. This activity is carried on under an entirely
15 different statutory program and has no connection with the regulation
16 of point source discharges to which Weyerhaeuser's Longview facilities
17 are subject.

18 We do not think that the dredge spoil deposition in Weyerhaeuser's
19 neighborhood can be included among "unique factors relating to the
20 applicant." The activities occur beyond Weyerhaeuser's complex and do
21 not "relate" to Weyerhaeuser at all.

22 We regard the offer of evidence on this subject as merely an
23 effort to introduce more water quality information through the side
24 door. We reject the attempt and hold that the material submitted on
25 dredging and dredge spoils in the Columbia River is irrelevant. We

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1 have not considered it.

2 Issue 3: Evidence Showing Economic Performance of Longview.

3 In Pasco and Lynnwood, supra, both involving municipal facilities,
4 we indicated that affordability was a subject we could consider. This
5 was because of our view that municipalities unlike industries cannot
6 simply cease operations.

7 We decline to entertain economic capability evidence in connection
8 with best conventional technology (BCT) for industrial sources. EPA
9 v. National Crushed Stone Association, 449 U.S. 64, 66 L.Ed. 268, 101
10 S. Ct. 295 (1980) limits federal Clean Water Act variances for
11 economic capability to limitations imposed under the more restrictive
12 standard of "best available technology economically achievable."
13 State law, we believe, must be at least as stringent as the federal
14 statute. RCW 90.48.260, 262(1).

15 Accordingly, we rule that the "reasonableness" or the treatment
16 imposed under chapter 90.48 RCW does not include considerations of
17 financial impact on the individual industrial permittee.

18 Issue 4: Department of Ecology Memorandum.

19 Weyerhaeuser offered into the record a memorandum written by
20 Ecology's permit writer to his superiors explaining options he
21 considered to be available on the treatment required to be applied to
22 Weyerhaeuser's Longview water plant effluent.

23 DOE objected to its admission as akin to an attempt to probe the
24 mental process to the decision-maker and therefore not admissible. We
25 concur.

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1 There is a privilege, initially developed by judge-made law,
2 designed to protect pre-decisional opinions about possible courses or
3 governmental action from judicial scrutiny. See United States v.
4 Morgan, 313 U.S. 409 (1941). The underlying idea is that compulsory
5 disclosure of such information could have a chilling effect on the
6 free and thoughtful expression of ideas in-house.

7 As long as the basis for a governmental decision is made
8 available, recourse need not be had to the deliberations which led up
9 to it. Compare Citizens to Preserve Overton Park, Inc. v. Volpe, 401
10 U.S. 402 (1971) with Camp v. Pitts, 411 U.S. 138 (1973). Here the
11 Best Engineering Judgment document prepared by Ecology clearly
12 fulfills the requirement for a statement of the agency's underlying
13 findings.

14 Further, we believe that the privilege has, in effect, been
15 codified in this state under RCW 42.17.310(1)(1) which exempts from
16 public disclosure "preliminary drafts, notes, recommendations and
17 intra-agency memorandums in which opinions are expressed or policies
18 formulated or recommended, . . . " We hold that the document in
19 question is within the terms of the foregoing quotation and that the
20 quoted language can serve as the basis for excluding evidence at
21 hearing.

22 Weyerhaeuser contends that if the document is privileged, the
23 privilege was waived when the document was made available to it
24 without objection on discovery. We decline to so rule. We find no
25 intentional relinquishment of a known right.

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FINDINGS OF FACT

I

On October 7, 1985, the Department of Ecology issued NPDES Permit No. WA 000012-4 and an accompanying administrative order (No. DE 85-416) to the Weyerhaeuser Company pulp and paper plant at Longview, Washington. This plant together with associated companies (NORPAC and R-W Paper) is one of the largest pulp and paper complexes in the world. Weyerhaeuser challenges the permit requirement that it treat discharges from its water treatment plant, and the imposition of new effluent limitations to approximately 250 tons per day of paper production capacity at NORPAC and R-W Paper, as well as raising various procedural challenges.

II

Weyerhaeuser's pulp and paper manufacturing operations and other facilities at Longview demand approximately 70 million gallons of clean water every day. Weyerhaeuser obtains water for this industrial use from the Columbia River at a point of diversion below the confluence of the Cowlitz River with the Columbia.

III

Raw water pumped from the Columbia River into Weyerhaeuser's facility is treated at five separate water treatment plants. (One of these is scheduled to be shut down next year.) Raw water is pretreated by the addition of chlorine, alum which acts as a flocculant, and sodium silicate which acts as a coagulant. The raw water is treated in each treatment plant first by quiescent settling

1 in a sedimentation basin to allow the heavier solids to collect on the
2 bottom of the basin and second by filtering through sand filters to
3 remove any remaining suspended or colloidal matter. Finished water is
4 pumped from the clear well at each water treatment plant into
5 Weyerhaeuser's various mills and associated facilities at Longview.

6 IV

7 Operation of Weyerhaeuser's water treatment plants results in
8 discharge of solids from four sources: filter backwash, desludging,
9 leakage, and basin washout. The solids discharged through these
10 sources consist of ordinary river sediment received into the company's
11 water treatment plants with the raw water pumped from the Columbia
12 River. The solids also include some alum added by Weyerhaeuser. The
13 net addition of alum is estimated by Weyerhaeuser to be 2,826 pounds
14 (dry weight) per day. By comparison Weyerhaeuser estimates that
15 compliance with Ecology's permit would mean that an average 40,035
16 pounds (dry weight) of solids removed from the raw water must be
17 treated and taken away for land disposal every day. (Ex. A-4).
18 Weyerhaeuser does not contest any requirement that it be responsible
19 for the net addition of alum to the river solids discharged from the
20 water treatment plants.

21 V

22 Solids are discharged from Weyerhaeuser's water treatment plant in
23 filter backwash every day the water treatment plants are in
24 operation. The filter backwash flow is 3.8 mgd and the dry weight of
25 solids discharged is 6,400 pounds per day. The material discharged in

desludging is approximately 1 mgd and 8,200 dry pounds of solids per day. The data indicates that leakage is 5 mgd and amounts to a discharge of 1,600 dry pounds of solids each day. The sampling and analytical method used produces solids data expressed as dry weight, but the actual discharge from these sources is about 97-98% water and two to three percent solids.

VI

Basin washout represents the largest discharge of solids. This occurs because approximately two-thirds of the solids Weyerhaeuser receives into its water treatment plants with its raw water supply settle in the sedimentation basins. Approximately 11 million dry pounds of solids are discharged through basin washout annually, compared to the total discharge of approximately 5.9 million dry pounds annually from all the other sources of solids identified above. Weyerhaeuser washes out the sedimentation basins in its water treatment plants twice a year during mill shutdown periods. The semiannual washouts usually take place over a five day period. The daily discharge of solids during these limited basin washdown periods thus amounts to approximately 1 million dry pounds per day.

VII

Disregarding the addition of alum, the total amount of pollutants now discharged from Weyerhaeuser's water treatment complex is the same as that drawn from the river in the intake. The discharges, however, are in a much more concentrated form.

VIII

Weyerhaeuser's existing water treatment plant produces an adequate quantity and quality of water to support the Longview mills' production. Weyerhaeuser has no current plan to construct any new water treatment plants. Weyerhaeuser does not plan to improve its existing water treatment plants, to collect solids for example, unless it is forced to do so by the conditions in its NPDES permit.

IX

NPDES Permit No. WAU00012-4 includes a section under Special Condition S1. which applies to discharges from Weyerhaeuser's water treatment plants:

WATER SUPPLY PLANTS' DISCHARGES TO OUTFALLS 001/002

The permittee shall provide 85 percent removal, on a mass basis, of the TSS in the discharges from the water supply plants, with the exception of the filter backwash which requires no treatment.

When the turbidity levels of the company's Columbia River intake water have returned to those existing prior to the Mt. St. Helens eruption, the company shall then also install facilities to remove 85 percent of the TSS in the filter backwash.

Any water supply plant, whose construction begins after the issuance of this permit, shall incorporate treatment of all discharges including filter backwash to remove 85 percent of the TSS.

Order DE 85-416 issued with the permit, provides, in pertinent part, that Weyerhaeuser shall:

1. Conduct a study which characterizes the TSS concentration, flow rate, and mass of each of the various wastewater streams from each water

supply plant. The method of study shall first be approved by the department. The completed study shall be submitted to the department by December 31, 1985.

2. The permit will be modified, after the aforementioned study has been completed, to state the appropriate TSS mass limitation at the water supply plants' discharge point to Outfall 001/002.
3. Prepare an engineering report which describes the design of the facilities and also the sampling methods and configuration to be used for monitoring. Submit the engineering report for approval by September 30, 1986.
4. Submit the final engineering plans for approval by March 31, 1987.
5. By March 31, 1988 operate the new facilities to meet the effluent limit at the water supply plants' discharge point to Outfall 001/002. Also by this date initiate sampling and reporting of the water supply plants' discharge. Prior to this date the TSS limitation at this point does not apply.

Weyerhaeuser has already submitted a report of the study called for by paragraph 1 of the order.

X

The Permit on page 2 states that NSPS constituted the basis for effluent limits placed on wastewater discharges attributable to increments of increased production at K-W Paper and NORPAC, and the allowance for BOD and TSS on page 3 of the permit attributable to such increased production was, in fact, formulated based on NSPS.

XI

On November 7, 1985 Weyerhaeuser filed its appeal with this Board.

XII

The effluent limitation imposed on Weyerhaeuser's water treatment plant calls essentially for primary treatment, a degree of pollutant removal traditionally accomplished by sedimentation. This basic technology has been available for decades. A variety of methods for meeting the limit imposed by Ecology are known and available. They vary substantially, however, as to cost.

Weyerhaeuser retained the engineering firm of CH2M Hill to prepare a detailed analysis of treatment methods capable of meeting the effluent limitation. CH2M Hill studied and prepared cost estimates of alternatives including installation of surge clarifiers, installation of solids settling ponds, and internal plant modifications. These three separate alternatives are all capable of achieving Ecology's 85% removal requirement.

The estimated costs for each was substantially above previous estimates prepared for the company to achieve the same treatment result. Ecology's analysis in writing the permit was based on these earlier estimates.

XIII

The least-cost alternative found by CH2M Hill capable of meeting the effluent limitation requirement was internal plant modifications. This proposal calls for modification of three of the existing clarifiers to provide superior settling and continuous removal of solids, together with mechanical dewatering of solids by belt presses, extensive repiping to interconnect the modified clarifiers with all

water treatment plant filter beads and disposal of dewatered sludge in a landfill. CH2M Hill estimated that installation of this alternative, if required, would cost Weyerhaeuser approximately \$14.3 million. Annual operation and maintenance required after construction would be an additional \$2.8 million.

For the purposes of analyzing the appropriateness of the water plant TSS limit, we find these figures credible.

XIV

CH2M Hill's estimates were based on the quantity of solids received into Weyerhaeuser's water treatment plants during 1984. That year is the most recent full year after the eruption of Mt. St. Helens with a reasonably normal amount of rainfall. The quantity of river solids received by the company's raw water treatment plants during the year depends, on the solids load in the Columbia River. The May, 1980 eruption of Mt. St. Helens increased the solids load in the Columbia at Weyerhaeuser's intake threefold. Credible estimates show that the enhanced sediment load in the Columbia River at Longview will continue beyond the five year life of the instant permit.

XV

The increased solids load in the Columbia River is one significant factor explaining why the most recent estimates for providing treatment of solids discharged from Weyerhaeuser's water treatment plants increased dramatically over 1979 estimates. Solids loading is a highly influential factor on initial capital costs. The company's operation and maintenance costs would not materially decrease with a

1 reduction in the solids received from the Columbia River.

2 XVI

3 The Longview pulp and papermaking operation started up in 1934.
4 Weyerhaeuser's oldest water treatment plant was constructed in 1932.
5 Although the plants still produce water of adequate quantity and
6 quality for Weyerhaeuser's purposes, the age of these facilities
7 contributes to Weyerhaeuser's increased cost of treatment relative to
8 other pulp mills. For example, Weyerhaeuser's water treatment plants
9 lack effective mechanisms to remove collected solids continuously
10 during operation. A large portion of CH2M Hill's internal plant
11 modifications alternative is nothing more than construction to
12 retrofit Weyerhaeuser's facilities to utilize current process
13 technology. This would not be required at a mill of modern design.

14 XVII

15 The configuration of Weyerhaeuser's five water treatment plants
16 also causes increased costs. The internal plant modifications
17 alternative requires interconnecting four of the five plants. A
18 modern water treatment system would not have four water treatment
19 plants producing 70 million gallons a day of clean water but would
20 build one plant with that capacity.

21 XVIII

22 For 1984, an average year, over 16 million pounds (dry weight) of
23 solids were received into Weyerhaeuser's water treatment plants with
24 the raw water from the Columbia River. Weyerhaeuser's mills demand 70
25 mgd of finished water. This is an extraordinarily large demand

1 relative to any municipal raw water treatment system described in the
2 record.

3 XIX

4 However, Weyerhaeuser's demand does not experience extensive
5 seasonal and daily shifts as does the typical municipal system. Thus,
6 plant size, constancy of water demand and the quality of the intake
7 water all combine to make the solids loading at Weyerhaeuser
8 extraordinarily high.

9 XX

10 Ecology's response in the permit to the increased solids from Mt.
11 St. Helens was to exempt temporarily the discharge of solids as filter
12 backwash from the agency's requirement for waste treatment. While a
13 laudable attempt at accommodation, on examination this exemption is of
14 little cost significance, reducing the total cost of treatment only by
15 an amount in the order of three percent.

16 XXI

17 Several other pulp and paper mills in this state are now meeting
18 treatment requirements imposed by Ecology for water plant sediments.
19 Weyerhaeuser's region environmental engineer conducted a survey of
20 those other mills looking at the treatment technology used and the
21 probable cost of treatment. A report reflecting the engineer's
22 findings indicates as a rough comparison that the maximum capital cost
23 of providing treatment where a pulp and paper mill in this state is
24 now providing treatment is less than one-fiftieth of the \$14 million
25 least-cost alternative identified by CH2M Hill in 1986. The typical

1 solids load received into other pulp and paper mills in this state is
2 in the range of hundreds of pounds per day compared to Weyerhaeuser's
3 47,100 dry pounds of solids received on an average day. The typical
4 method of treatment used at other pulp and paper mills where treatment
5 is provided is to put water treatment plant solids through the mill's
6 existing process wastewater treatment system. There are essentially
7 no comparative data on operating costs.

8 XXII

9
10 An effluent limitation somewhat similar to the limitation placed
11 on Weyerhaeuser's Longview facility has been imposed on discharges of
12 waste from municipal water treatment plants also. Substantial
13 variations, daily and seasonally, in water demand at municipal plants
14 tend to undercut any comparison of such plants with Weyerhaeuser's.
15 The solids loading at the municipal plants will tend to be less.
16 Since the cost estimates before us show solids loading as a major
17 factor in driving up costs, we were unconvinced on the record before
18 us that there was a valid basis for comparing Weyerhaeuser's estimated
19 costs to costs of providing treatment at municipal water plants.
20 Moreover, we were not persuaded that the cost figures given for the
21 municipal plants themselves were numbers in which we should have
22 confidence.

23 Ecology also attempted also to compare the costs imposed on
24 Weyerhaeuser with the costs of such reductions of TSS at publicly
25 owned treatment works. Again we were unconvinced of the validity of
26 either the figures used or comparison made (upgrading from primary to

secondary treatment).

XXIII

Solids removed from Weyerhaeuser's water treatment plant discharges, if the Department of Ecology's effluent limitation were to be affirmed, will be dewatered and taken to a landfill for disposal. No evidence was presented of any viable disposal alternative, assuming the permit was to be affirmed, other than placing the solids into a landfill.

XXIV

Weyerhaeuser now disposes of solids generated at its Longview complex at the Radakovich landfill in Longview. Ecology has found violations of the state's minimum functional standards for solid waste handling, and of the state's ground and surface water pollution prevention statutes at the Radakovich site.

XXV

The solids removed from raw water in the company's water treatment plants at Longview after dewatering would be disposed of in the form of sludge consisting of 15% solids and 85% water. The addition of this sludge to the Radakovich landfill would worsen the existing ground and surface water pollution problems experienced at that landfill.

Both parties assume that Weyerhaeuser will have to find a new disposal site, and bear the costs of making it suitable for the deposit of sludge. Ecology disagrees with the costs CH2M Hill has estimated for solid waste disposal but we find no basis for disputing

1 them.

2 XXVI

3 Ecology's permit writer did not prepare a checklist or make a
4 threshold determination under the State Environmental Policy Act
5 (SEPA).

6 XXVII

7 Four drafts of NPDES Permit WA000012-4 were prepared before the
8 final permit was issued: in May 1985, October 1984, June 1984, and
9 April 1984. A fact sheet was prepared and notice was published only
10 for the June 1984 permit.

11 XXVIII

12 Ecology's final permit on October 7, 1985 differed from the draft
13 permit of June 1984 and from the last draft given to Weyerhaeuser (May
14 1985).

15 XXIX

16 The U.S. Environmental Protection Agency (EPA) has not adopted a
17 nationally applicable effluent guideline for discharges of waste from
18 raw water treatment plants. EPA has adopted regulations to use to
19 develop effluent limitations for NPDES permits in the absence of
20 nationally applicable guidelines. Ecology attempted to follow these
21 criteria in preparing its Best Engineering Judgment document, produced
22 on September 13, 1985, providing the basis for its determination that
23 85 percent removal of TSS (except filter backwash) from the water
24 plant represents best conventional technology (BCT). This level of
25 treatment was also believed by Ecology to meet the requirements of

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state law.

XXX

The effluent limitation placed on Weyerhaeuser's water treatment plant was derived from general guidelines derived over time within Ecology. The concepts involved have appeared in various internal documents which were included in the Best Engineering Judgment document. The limitation in question has never been adopted as a rule under the State Administrative Procedures Act.

XXXI

The permit appealed here, with regard to the water treatment plant wastes, does not allow any "credit" toward compliance with the effluent limitation to account for TSS received into Weyerhaeuser's water treatment plant with its raw water. "Credit" for solids in intake water has been provided for other dischargers on a milligram per liter basis, but not on a mass basis.

XXXII

The permit allows Weyerhaeuser to discharge 48,000 lbs./day TSS (daily average) to the Columbia River from its process wastewater treatment system. Weyerhaeuser operates its process water treatment system such that a portion of the authorized TSS discharge is unused. Ecology established a separate compliance point for the effluent limitation on the company's water treatment plant solids discharge which must be met independently. The company is not allowed, thus, to use up any of the unused portion of the TSS limitation on its process wastewaters.

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1 XXXIII

2 NORPAC is a paper mill associated with Weyerhaeuser whose wastes
3 are treated in the Weyerhaeuser treatment plant and which are
4 therefore covered by the subject NPDES permit. NORPAC currently has
5 nine pulp refiner lines feeding two paper machines. Four of these
6 refiner lines feed the number one paper machine, and four feed the
7 number two paper machine. The ninth refiner line is capable of being
8 used with either paper machine, but is used with the number two
9 machine most of the time. Due to peculiarities in the regulatory
10 history, federal new source performance standards are applied to the
11 number one paper machine, while less stringent best practicable
12 control technology currently available (BPT) standards are applied to
13 the other paper machine. These standards were contained in the prior
14 permit and are not a subject of this appeal. The ninth refiner line
15 adds about 150 tons per day of new capacity to NORPAC, and is being
16 covered for the first time in the subject NPDES permit. Ecology
17 applied limitations equivalent to new source performance standards to
18 this production increment.

19 XXXIV

20 So far as is relevant here, there is no physical difference
21 between the nine refiner lines or the two paper machines at NORPAC.
22 Weyerhaeuser is capable of meeting, and has been meeting, effluent
23 limits based upon new source performance standards for the production
24 increment represented by the ninth refiner line without making any
25 physical change to the facility.

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1 XXXV

2 R-W Paper is another associated facility whose wastes are treated
3 in the Weyerhaeuser treatment plant and which are therefore covered by
4 the subject NPDES permit. That facility recently did a major rebuild
5 of its paper machine, costing \$20 to \$25 million, which added about
6 100 tons per day of production capacity. The subject permit applies
7 limits based upon federal new source performance standards to the
8 increased production capacity only.

9 XXXVI

10 Weyerhaeuser is capable of meeting, and has been meeting, effluent
11 limits based upon new source performance standards for the increased
12 production at R-W Paper without making any physical change to the
13 facility.

14 XXXVII

15 Federal new source performance standards are based in part upon in
16 plant controls, such as recycling and water saving devices, which
17 would normally be incorporated in any major rebuild, modernization or
18 expansion of a pulp or paper mill. Even when not required by federal
19 law, Ecology has been applying effluent limitations based upon new
20 source performance standards as a matter of state law to new
21 production capacity resulting from major expansions or rebuilds at
22 pulp and paper mills.

23 XXXVIII

24 The major difference which imposition of new source limits to the
25 new production capacities at NOKPAC and R-W Paper makes in the overall

1 permit limitations is to reduce the allowance for BOD (biological
2 oxygen demand) by about five percent. The mill is currently meeting
3 the more stringent limits.

4 XXXIX

5 Any Conclusion of Law which is deemed a Finding of Fact is hereby
6 adopted as such. From these Findings of Fact, the Board comes to these

7 CONCLUSIONS OF LAW

8 I

9 The Board has jurisdiction over these parties and these issues.
10 Chapter 43.21B RCW.

11 II

12 Chapter 90.48 RCW, the State Water Pollution Control Act, provides
13 the basic framework for the program of water pollution control in
14 effect in this state. That program includes the requirement that any
15 person who conducts an industrial operation which results in the
16 disposal of liquid waste materials into the waters of this state
17 obtain a permit from the Department of Ecology. RCW 90.48.160.

18 III

19 Effluent limitations under state law must conform with the
20 requirement that dischargers shall provide "All known, available, and
21 reasonable methods of treatment." RCW 90.48.010, 90.52.04,
22 90.54.020(3).

23 No one here argues that technologies for the limitations placed on
24 the discharges from both the water plant and the new production at
25 NORPAC and R-W Paper are not "known or available." The essential

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question is whether these limitations are "reasonable."

IV

The NPDES permit program is a federal law program administered by Ecology under authority provided by state law. RCW 90.48.260. Ecology is authorized, and required, to implement in NPDES permits issued by it the effluent limitations mandated by the federal Clean Water Act, 33 U.S.C. Sec. 1251 et seq. Ecology cannot impose limitations which are weaker than those required federally, RCW 90.48.260, 262. However, the state retains the authority to impose more stringent limitations than required by the Clean Water Act. 33 U.S.C. Sec. 1311(b)(1)(c), and Sec. 1370.

V

EPA, has not adopted any effluent limitations applicable to discharges to navigable waters from water treatment plants. In circumstances such as these, the appropriate level of treatment is to be determined on a case-by-case basis. The relevant federal treatment standard for the water plant discharges at issue is "best conventional technology" (BCT). 40 CFR 125.3.

In establishing the limits for Weyerhaeuser's water treatment plant, Ecology was overtly trying to conform to the BCT standard. Thus, the limits imposed by state law were not intended to be more stringent than required by federal law. Accordingly, as to the water treatment plant discharge, BCT and "all known, available and reasonable methods" were treated by Ecology as the same thing.

1 VI

2 In the absence of generally applicable effluent limitations, 40
3 CFR 125.3(c) and (d) provides a list of factors to be considered in
4 the case-by-case limit setting process. Ecology attempted to apply
5 this federal regulation to NPDES Permit No. WA000012-4 as that permit
6 concerns discharges from Weyerhaeuser's water treatment plans.

7 VII

8 Under 40 CFR 125.3(d)(2), derivation of the basic BCT requirements
9 necessitates some comparisons. The first of these is

10 The reasonableness of the relationship between
11 the costs of attaining a reduction in effluent and
12 the effluent reduction benefits derived.

13 On the record before us, we cannot say that this relationship is
14 reasonable. Weyerhaeuser showed credible figures for an expenditure
15 of \$14.3 million in order to achieve the removal on a mass basis of
16 85% of the solids which are taken into the mill in the water plant
17 intake water.

18 Though the discharge of solids in a more concentrated form may
19 technically qualify as the addition of a pollutant, any TSS reduction
20 achieved by treatment at the site is attributable to the very
21 existence of the Weyerhaeuser's water plant. Closure of the whole
22 operation would result in less TSS reduction on a mass basis than the
23 treatment requirement imposed by Ecology.

24 Under these circumstances, we conclude that a prima facie case of
25 unreasonableness was made out by the cost figures introduced by the
26 company. It was then incumbent on Ecology to go forward with evidence

to overcome this. We hold that they did not do so.

VIII

The second of the comparisons and 40 CFR 125.3(3)(2) is:

The comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources.

Weyerhaeuser proved that this comparison was not properly made. The POTW cost figures used by Ecology were of doubtful current validity. Moreover, Ecology did not derive cost figures for a class of industrial sources, but looked at Weyerhaeuser's costs alone on that side of the equation.

Ecology did attempt to compare Weyerhaeuser's costs to those at municipal water treatment plants across the state.

To the extent this represented an attempt to equate municipal plants with industrial plants operated by pulp and paper manufacturers, we were convinced that an across-the-board comparison is flawed. And again, our confidence in the cost figures themselves was undermined by the evidence.

IX

We conclude that Ecology failed to perform properly the analysis required by 40 CFR 125.3 in establishing the basic level of treatment here.

X

Once the basic level of treatment is established, 40 CFR 125.3

1 requires an additional look at the specific source to evaluate "any
2 unique factors relating to the applicant."

3 The "unique factors" consideration was limited to the effects of
4 the Mt. St. Helens eruption. Ecology's remedy to this unique factor
5 was to allow filter backwash to be discharged without treatment until
6 turbidity in the Columbia River returned to pre-eruption levels.
7 However, the cost of treating all wastes versus treating all wastes
8 except filter backwash differed by less than approximately three
9 percent. We hold that Ecology did not appropriately consider the one
0 unique factor it did recognize.

11 In addition, there was no explanation of why the advanced age of
12 the water treatment facilities at Weyerhaeuser was not included among
13 unique factors relating to this particular applicant. Modernization
14 was unarguably a substantial factor in Weyerhaeuser's cost figures.

15 XI

16 We conclude that in this case, failure to comply with the federal
17 requirements for case-by-case establishment of effluent limits, is
18 also a failure to comply with the state standard of "reasonableness."

19 Our analysis focuses on whether the level of treatment required
20 for the source would involve significantly greater costs than for
21 other sources within the same class of dischargers to obtain the same
22 levels of treatment. See Port Angeles v. Department of Ecology, PCHB
23 No. 84-178, (October 4, 1985).

24 We decline, as mentioned at the outset, to consider whether the
25 treatment is within the economic ability of the source to meet the

costs of treatment. See EPA v. National Crushed Stone, 449 U.S. 64, 66 L.Ed.2d 268, 101 S. Ct. 295 (1980).

XII

Weyerhaeuser established that the cost of the waste treatment facility would be significantly higher than costs which have been incurred by pulp and paper manufacturing operations with water treatment plant discharges subject to the Ecology's authority.

Ecology did not come forward with countervailing evidence which we found persuasive. Thus, although the standard set by Ecology is technologically feasible, we cannot sustain its reasonableness as to cost.

XIII

Ecology did not prepare an environmental checklist or make a threshold determination pursuant to SEPA. We hold there was no error in this regard. The issuance of permit WA000012-4 was categorically exempt from those procedures. WAC 197-11-855(1). We do not choose to look behind the exemption in this case.

XIV

Ecology bases its use of NSPS limits for the production increases at NORPAC and R-W Paper upon state law, claiming that these standards reflect the use of known, available and reasonable technology. We agree. The equipment is in place, operating, and meeting the limitations without any additional expenditure.

Appellant argues that the state standard is too uncertain. This argument was made and rejected in the air pollution context

1 Weyerhaeuser Co. v. Southwest Air Pollution Control Authority, 91
2 Wn.2d 77, 586 P.2d 1163 (1978). We think the same rationale applies
3 under the water pollution laws. Accordingly, we sustain the limits
4 set for new production at NORPAC and R-W Paper. These limits are more
5 stringent than federally required, but "reasonable" as a matter of
6 state law.

7 XV

8 Weyerhaeuser has raised several other procedural issues in its
9 challenge to this permit and order. We have considered these
10 additional contentions and conclude that they are without merit.

11 XVI

12 Any Finding of Fact which is deemed a Conclusion of Law is hereby
13 adopted as such.

14 From these Conclusions of Law, the Board enters this

ORDER

Order No. DE 85-416 issued by the Department of Ecology to Weyerhaeuser Company, Pulp and Paperboard Division, Longview, on October 7, 1985, is reversed.


That portion of NPDES Permit No. WA000012-4 appearing on page 4 thereof under the heading Water Supply Plants' Discharges to Outfalls 001/002 is reversed and remanded to the Department for modification, consistent with the provisions of RCW 90.52.040. The issuance of any such modification shall comply with the provisions of WAC 173-220-190(3) and shall, upon issuance, be appealable to this Board pursuant to chapter 43.21B RCW.


The effluent limitations imposed in NPDES Permit No. WA000012-4 on the increased production increments for NORPAC and R-W Paper are affirmed.

DONE this 15th day of July, 1986.

POLLUTION CONTROL HEARINGS BOARD

 7/11/86
LAWRENCE J. FAULK, Chairman

 7/11/86
GAYLE ROTHROCK, Vice Chairman


WICK DUFFORD, Lawyer Member